

L Number	Hits	Search Text	DB	Time stamp
-	343	118/715-733.ccls. and ((liner shutter shield) with (cylinder cylindrical\$3))	USPAT; US-PGPUB	2003/12/09 14:20
-	271	118/715-733.ccls. and ((liner shutter shield) with cool\$3)	USPAT; US-PGPUB	2003/06/08 16:02
-	263	118/715-733.ccls. and ((liner shutter shield) with (reactor chamber)) and applied.as.	USPAT; US-PGPUB	2003/06/08 15:07
-	89	118/715-733.ccls. and ((liner shutter shield) with (reactor chamber) with (annular cylindrical\$ cylinder)) and applied.as.	USPAT; US-PGPUB	2003/06/08 15:25
-	174	((118/715-733.ccls. and ((liner shutter shield) with (reactor chamber)) and applied.as.) not (118/715-733.ccls. and ((liner shutter shield) with (reactor chamber) with (annular cylindrical\$ cylinder)) and applied.as.)	USPAT; US-PGPUB	2003/06/08 15:25
-	12	(US-6197121-\$ or US-6202591-\$ or US-6229116-\$ or US-6228171-\$ or US-6227140-\$ or US-6231732-\$ or US-5951775-\$ or US-6051122-\$ or US-6143086-\$ or US-6221221-\$ or US-6264812-\$ or US-6192827-\$).did.	USPAT	2003/06/08 15:32
-	4	((US-6197121-\$ or US-6202591-\$ or US-6229116-\$ or US-6228171-\$ or US-6227140-\$ or US-6231732-\$ or US-5951775-\$ or US-6051122-\$ or US-6143086-\$ or US-6221221-\$ or US-6264812-\$ or US-6192827-\$).did.) and cool	USPAT; US-PGPUB	2003/06/08 15:32
-	8	((US-6197121-\$ or US-6202591-\$ or US-6229116-\$ or US-6228171-\$ or US-6227140-\$ or US-6231732-\$ or US-5951775-\$ or US-6051122-\$ or US-6143086-\$ or US-6221221-\$ or US-6264812-\$ or US-6192827-\$).did.) and cool\$3	USPAT; US-PGPUB	2003/06/08 15:32
-	28	5788799.URPN.	USPAT	2003/06/08 15:55
-	15	5788799.URPN. and cool\$3	USPAT; US-PGPUB	2003/06/08 15:46
-	2	"04157162"	EPO; JPO; DERWENT	2003/06/08 15:56
-	35747	((liner shutter shield) with (cool\$3 annular cylindrical\$ cylinder))	USPAT; US-PGPUB	2003/06/08 16:05
-	6284	c23c016\$.ipc.	USPAT; US-PGPUB	2003/06/08 16:07
-	53026	h011021\$.ipc.	USPAT; US-PGPUB	2003/06/08 16:07
-	5463	(deposit\$3 etch\$3 "cvd" layer film) same ((liner shutter shield) with (cool\$3 annular cylindrical\$ cylinder))	USPAT; US-PGPUB	2003/06/08 16:06
-	0	(c23c016\$.ipc. h011021\$.ipc.) and ((liner shutter shield) with (cool\$3 annular cylindrical\$ cylinder))	EPO; JPO; DERWENT	2003/06/08 16:06
-	0	(c23c016\$.ipc. h011021\$.ipc.) and ((liner shutter shield) with (cool\$3) with (annular cylindrical\$ cylinder))	EPO; JPO; DERWENT	2003/06/08 16:06
-	0	(c23c016\$.ipc. h011021\$.ipc.) and ((liner shutter shield) same (cool\$3) same (annular cylindrical\$ cylinder))	EPO; JPO; DERWENT	2003/06/08 16:07
-	48231	c23c016\$.ipc.	EPO; JPO; DERWENT	2003/06/08 16:07
-	742974	h011021\$.ipc.	EPO; JPO; DERWENT	2003/06/08 18:08
-	34	(c23c016\$.ipc. h011021\$.ipc.) and ((liner shutter shield) same (cool\$3) same (annular cylindrical\$ cylinder))	EPO; JPO; DERWENT	2003/06/08 16:07
-	0	20020069970.URPN.	USPAT	2003/06/08 16:31
-	1	("6111255").PN.	USPAT; US-PGPUB	2003/06/08 17:26

-	1	("6111225").PN.	USPAT;	2003/06/08 17:26
-	15	h011021\$.ipc. and (reactor with "stainless steel")	US-PGPUB	2003/06/08 17:28
-	634	h011021\$.ipc. and ((multiple plural\$3) with (wafer substrate) with carrier)	EPO; JPO; DERWENT	2003/06/08 18:10
-	84	118/728.ccls. and ((multiple plural\$3) with (wafer substrate) with holder)	EPO; JPO; DERWENT	2003/06/08 18:15
-	42	118/728.ccls. and ((multiple plural\$3) with (wafer substrate) with carrier)	USPAT;	2003/06/08 18:11
-	6	118/728.ccls. and ((multiple plural\$3) with (wafer substrate) with holder) and 118/719.ccls.	US-PGPUB	2003/06/08 18:16
-	84	((multiple plural\$3) with (wafer substrate) with holder) and 118/719.ccls.	USPAT;	2003/06/08 18:16
-	24	((multiple plural\$3) with (wafer substrate) with holder with (transfer\$4 transport\$3)) and 118/719.ccls.	US-PGPUB	2003/06/08 18:17
-	35	118/715-733.ccls. and ((wafer substrate) with (holder) with (secur\$3 attach\$3) with (spindle rotat\$3))	USPAT;	2003/06/08 18:30
-	5	118/715-733.ccls. and ((wafer substrate) with (carrier holder) with (attach\$3 secur\$3) with spindle)	US-PGPUB	2003/06/09 09:05
-	330	118/715-733.ccls. and ((wafer substrate) with (carrier holder) with (attach\$3 secur\$3))	USPAT;	2003/06/09 09:09
-	62	118/719.ccls. and ((wafer substrate) with (carrier holder) with (attach\$3 secur\$3))	US-PGPUB	2003/06/09 09:09
-	2	(shield shutter liner) with (conduit groove channel) with (entire) with (circumference perimeter) with fluid	USPAT;	2003/12/05 16:49
-	11	(118/\$.ccls. 156/345.\$.ccls.) and ((shield shutter liner) with (conduit groove channel) with (circumference perimeter))	US-PGPUB	2003/12/05 16:56
-	0	(118/\$.ccls. 156/345.\$.ccls.) and ((shield shutter liner) with (conduit groove channel) with (entire) with fluid)	USPAT;	2003/12/05 16:56
-	2	(118/\$.ccls. 156/345.\$.ccls.) and ((wall) with (conduit groove channel) with (entire) with fluid)	US-PGPUB	2003/12/05 16:57
-	2	(118/\$.ccls. 156/345.\$.ccls.) and ((side\$1wall wall) with (conduit groove channel) with (circumference perimeter) with fluid)	USPAT;	2003/12/05 17:05
-	2	(118/\$.ccls. 156/345.\$.ccls.) and ((side\$1wall wall) with (conduit groove channel) with (circumference perimeter) with (cool\$3))	US-PGPUB	2003/12/05 17:06
-	1	(118/\$.ccls. 156/345.\$.ccls.) and ((shutter liner shield) with (conduit groove channel) with (circumference perimeter) with (cool\$3))	USPAT;	2003/12/05 17:08
-	4	(118/\$.ccls. 156/345.\$.ccls.) and ((shutter liner shield) with (circumference perimeter) with (cool\$3 fluid))	US-PGPUB	2003/12/05 17:09
-	7	(118/\$.ccls. 156/345.\$.ccls.) and ((shutter liner shield) with (entire) with (cool\$3 fluid))	USPAT;	2003/12/05 17:10
-	5	(118/\$.ccls. 156/345.\$.ccls.) and ((circumference perimeter) with (entire) with (cool\$3))	US-PGPUB	2003/12/05 17:14
-	16	(118/\$.ccls. 156/345.\$.ccls.) and ((circumference perimeter) with (entire) with (fluid))	USPAT;	2003/12/05 17:18
-	18	("4276603" "4570054" "4688180" "4711989" "4738618" "4761538" "4937434" "5000682" "5001327" "5099442" "5258601" "5280422" "5291514" "5436172" "5517594" "5555725" "5661669" "5782227").PN.	USPAT	2003/12/05 17:17

-	1	(c23c016\$.ipc.) and ((cool\$3) with (channel groove conduit) with entire with (uniform even))	EPO; JPO; DERWENT	2003/12/05 17:20
-	2	(c23c016\$.ipc.) and ((cool\$3) with (channel groove conduit) with (uniform even))	EPO; JPO; DERWENT	2003/12/05 17:20
-	1	(c23c016\$.ipc.) and ((cool\$3) with (channel groove conduit) with (circumference perimeter))	EPO; JPO; DERWENT	2003/12/05 17:21
-	0	(c23c016\$.ipc.) and ((temperature with fluid) with (channel groove conduit) with (circumference perimeter))	EPO; JPO; DERWENT	2003/12/05 17:22
-	449	((cool\$3) with (channel groove conduit) with (circumference perimeter))	EPO; JPO; DERWENT	2003/12/05 17:22
-	58	((cool\$3) with (channel groove conduit) with (circumference perimeter) with (liner wall side\$1wall shield shutter))	EPO; JPO; DERWENT	2003/12/05 17:35
-	29	((cool\$3) with (entire) with (circumference perimeter) with (liner wall side\$1wall shield shutter))	EPO; JPO; DERWENT	2003/12/05 17:41
-	24	((cool\$3) with (entire) with (circumference perimeter) with (liner wall side\$1wall shield shutter))) not ((cool\$3) with (channel groove conduit) with (circumference perimeter) with (liner wall side\$1wall shield shutter)))	EPO; JPO; DERWENT	2003/12/08 16:05
-	107	((cool\$3) with (entire) with (circumference perimeter) with (liner wall side\$1wall shield shutter))	USPAT; US-PGPUB	2003/12/05 17:42
-	3	204/298.11.ccls. and (cool\$3)	EPO; JPO; DERWENT	2003/12/08 16:33
-	246	204/298.11.ccls. and (cool\$3)	USPAT; US-PGPUB	2003/12/08 16:33
-	49	204/298.11.ccls. and (cool\$3 with (channel groove conduit))	USPAT; US-PGPUB	2003/12/08 16:49
-	4881	(shield shutter liner) with (temperature thermal\$4 cool\$3 heat\$3) with (even\$3 transfer\$4)	USPAT; US-PGPUB	2003/12/08 16:50
-	1551	(shield shutter liner) with (temperature thermal\$4 cool\$3 heat\$3) with (even\$3 transfer\$4)	EPO; JPO; DERWENT	2003/12/08 16:50
-	652	(shield shutter liner) with (temperature thermal\$4 cool\$3 heat\$3) with (even\$3)	EPO; JPO; DERWENT	2003/12/08 16:51
-	3	c23c016\$.ipc. and ((shield shutter liner) with (temperature thermal\$4 cool\$3 heat\$3) with (even\$3)	EPO; JPO; DERWENT	2003/12/08 16:52
-	15	(118/715-733.ccls. 156/345\$.ccls. 204/298\$.ccls. 118/504.ccls.) and ((shield shutter liner) with (temperature thermal\$4 cool\$3 heat\$3) with (even\$3 balanc\$3 equal\$4))	EPO; JPO; DERWENT	2003/12/08 16:56
-	77	(118/715-733.ccls. 156/345\$.ccls. 204/298\$.ccls. 118/504.ccls.) and ((shield shutter liner) with (temperature thermal\$4 cool\$3 heat\$3) with (even\$3 balanc\$3 equal\$4))	USPAT; US-PGPUB	2003/12/08 17:42
-	8	("5336585" "5362526" "5366585" "5449444" "5487822" "5518593" "5728278" "6083365").PN.	USPAT	2003/12/08 17:14
-	0	6432203.URPN.	USPAT	2003/12/08 17:22
-	0	6442950.URPN.	USPAT	2003/12/08 17:27
-	9	("2437414" "4981102" "5482559" "5740845" "5879461" "6000227" "6120660" "6125551" "6331212").PN.	USPAT	2003/12/08 17:27
-	28	(118/715-733.ccls. 156/345\$.ccls. 204/298\$.ccls. 118/504.ccls.) and ((cool\$3) with (coil\$3 wrap\$3 wind\$3) with (perimeter circumference))	USPAT; US-PGPUB	2003/12/08 17:58
-	1	("6442950").PN.	USPAT; US-PGPUB	2003/12/08 17:58

-	9	("2437414" "4981102" "5482559" "5740845" "5879461" "6000227" "6120660" "6125551" "6331212").PN.	USPAT	2003/12/08 18:28
-	231	118/715-733.ccls. and ("wafer carrier" "wafer frame")	USPAT; US-PGPUB	2003/12/09 11:15
-	103	118/715-733.ccls. and (("wafer carrier" "wafer frame") with (mount\$3 hold\$3))	USPAT; US-PGPUB	2003/12/09 11:44
-	3	5759281.URPN.	USPAT	2003/12/09 11:22
-	18	("4529621" "4550047" "4653428" "4791651" "5186756" "5264038" "5387447" "5520742" "5624499" "5759281" "5855675" "5855998" "5879450" "5888591" "6001183" "6045877" "6261363" "6300601").PN.	USPAT	2003/12/09 11:24
-	4	6001183.URPN.	USPAT	2003/12/09 11:25
-	4	6001183.URPN.	USPAT	2003/12/09 11:26
-	17	("4599069" "4903754" "4986215" "5044943" "5152842" "5226383" "5242501" "5343938" "5344492" "5366002" "5376180" "5384008" "5403401" "5460684" "5474612" "5690742" "5782970").PN.	USPAT	2003/12/09 11:26
-	2	(118/\$.ccls. 156/345.\$.ccls.) and (("wafer frame") with (protect\$3))	USPAT; US-PGPUB	2003/12/09 11:50
-	10	("5246524" "5474647" "5590445" "5672239" "5891298" "6030485" "6149758" "6218727" "6238515" "6239038").PN.	USPAT	2003/12/09 11:46
-	10	("5246524" "5474647" "5590445" "5672239" "5891298" "6030485" "6149758" "6218727" "6238515" "6239038").PN.	USPAT	2003/12/09 11:49
-	0	6569282.URPN.	USPAT	2003/12/09 11:49
-	14	(118/\$.ccls. 156/345.\$.ccls.) and (("wafer frame"))	USPAT; US-PGPUB	2003/12/09 12:10
-	14	3918756.URPN.	USPAT	2003/12/09 11:52
-	7	("0071336" "2165417" "3219375" "3486631" "3610613" "3804311" "3834349").PN.	USPAT	2003/12/09 11:54
-	23	("4306731" "4473455" "4779877" "5046909" "5093550" "5256204" "5275521" "5372471" "5377476" "5382127" "5388945" "5636964" "5668056" "5669644" "5679404" "5841515" "5911461" "5970621" "5976199" "6068441" "6099652" "6158951" "6162299").PN.	USPAT	2003/12/09 12:06
-	1	("4311427").PN.	USPAT; US-PGPUB	2003/12/09 12:10
-	63	118/715-733.ccls. and ((liner shutter shield) with (hollow\$3))	USPAT; US-PGPUB	2003/12/09 14:21
-	23	156/345.\$.ccls. and ((liner shutter shield) with (hollow\$3))	USPAT; US-PGPUB	2003/12/09 14:21
-	5	156/345.\$.ccls. and ((liner shutter shield) with (hollow\$3) with (cool\$3 heat\$3 fluid))	USPAT; US-PGPUB	2003/12/09 14:22
-	25	118/715-733.ccls. and ((liner shutter shield) with (hollow\$3) with (cool\$3 heat\$3 fluid))	USPAT; US-PGPUB	2003/12/09 15:00
-	14	gurary-alexander.in. elman-scott.in. moy-keng.in. boguslavskiy-vadim.in.	USPAT; US-PGPUB	2003/12/09 15:09

-	93	(US-6442950-\$ or US-6408786-\$ or US-6312555-\$ or US-6231732-\$ or US-6229116-\$ or US-6228171-\$ or US-6227140-\$ or US-6202591-\$ or US-6197121-\$ or US-6129808-\$ or US-5994675-\$ or US-5904800-\$ or US-5902404-\$ or US-5097890-\$ or US-5060354-\$ or US-4989543-\$ or US-4561382-\$ or US-3659552-\$ or US-6264812-\$ or US-6221221-\$ or US-6143086-\$ or US-6063199-\$ or US-6051122-\$ or US-5951775-\$ or US-6192827-\$ or US-6347636-\$).did. or (US-6111225-\$ or US-6206975-\$ or US-6340501-\$ or US-6331212-\$ or US-4311427-\$ or US-3656454-\$ or US-6603269-\$ or US-4336329-\$ or US-3909207-\$ or US-6432203-\$ or US-5449444-\$ or US-6310328-\$ or US-5970214-\$ or US-4705700-\$ or US-6547876-\$ or US-6492625-\$ or US-6289842-\$ or US-6001183-\$ or US-5759281-\$ or US-4911638-\$ or US-5044943-\$ or US-6569282-\$ or US-5590445-\$ or US-5246524-\$ or US-6318957-\$ or US-5184723-\$ or US-3918756-\$).did. or (US-4354453-\$ or US-6158951-\$ or US-5911461-\$ or US-5046909-\$ or US-4779877-\$ or US-5788799-\$ or US-5472509-\$ or US-4960488-\$).did. or (US-20030037880-\$ or US-20020185068-\$ or US-20020144786-\$ or US-20020166632-\$ or US-20020144657-\$ or US-20020144655-\$ or US-20020108571-\$ or US-20020076490-\$ or US-20020069970-\$ or US-20010054483-\$ or US-20010029888-\$ or US-20020104751-\$ or US-20030042131-\$ or US-20020104619-\$).did. or (JP-04157162-\$ or JP-11067656-\$ or JP-08031756-\$ or JP-07029912-\$ or JP-03104222-\$ or JP-60231332-\$ or JP-07070730-\$ or JP-10054688-\$ or JP-56099060-\$ or JP-07103658-\$ or JP-58096814-\$).did. or (JP-04157162-\$ or WO-200299861-\$ or JP-2001270798-\$ or JP-07029912-\$ or JP-08139039-\$ or DE-4231921-\$ or JP-05190464-\$).did. (US-2437414-\$).did.	USPAT; US-PGPUB; JPO; DERWENT	2004/08/17 11:38
-	1		USOCR	2004/08/17 11:36

-	72	((US-6442950-\$ or US-6408786-\$ or US-6312555-\$ or US-6231732-\$ or US-6229116-\$ or US-6228171-\$ or US-6227140-\$ or US-6202591-\$ or US-6197121-\$ or US-6129808-\$ or US-5994675-\$ or US-5904800-\$ or US-5902404-\$ or US-5097890-\$ or US-5060354-\$ or US-4989543-\$ or US-4561382-\$ or US-3659552-\$ or US-6264812-\$ or US-6221221-\$ or US-6143086-\$ or US-6063199-\$ or US-6051122-\$ or US-5951775-\$ or US-6192827-\$ or US-6347636-\$).did. or (US-6111225-\$ or US-6206975-\$ or US-6340501-\$ or US-6331212-\$ or US-4311427-\$ or US-3656454-\$ or US-6603269-\$ or US-4336329-\$ or US-3909207-\$ or US-6432203-\$ or US-5449444-\$ or US-6310328-\$ or US-5970214-\$ or US-4705700-\$ or US-6547876-\$ or US-6492625-\$ or US-6289842-\$ or US-6001183-\$ or US-5759281-\$ or US-4911638-\$ or US-5044943-\$ or US-6569282-\$ or US-5590445-\$ or US-5246524-\$ or US-6318957-\$ or US-5184723-\$ or US-3918756-\$).did. or (US-4354453-\$ or US-6158951-\$ or US-5911461-\$ or US-5046909-\$ or US-4779877-\$ or US-5788799-\$ or US-5472509-\$ or US-4960488-\$).did. or (US-20030037880-\$ or US-20020185068-\$ or US-20020144786-\$ or US-20020166632-\$ or US-20020144657-\$ or US-20020144655-\$ or US-20020108571-\$ or US-20020076490-\$ or US-20020069970-\$ or US-20010054483-\$ or US-20010029888-\$ or US-20020104751-\$ or US-20030042131-\$ or US-20020104619-\$).did. or (JP-04157162-\$ or JP-11067656-\$ or JP-08031756-\$ or JP-07029912-\$ or JP-03104222-\$ or JP-60231332-\$ or JP-07070730-\$ or JP-10054688-\$ or JP-56099060-\$ or JP-07103658-\$ or JP-58096814-\$).did. or (JP-04157162-\$ or WO-200299861-\$ or JP-2001270798-\$ or JP-07029912-\$ or JP-08139039-\$ or DE-4231921-\$ or JP-05190464-\$).did.) and cool\$3	USPAT; US-PGPUB; JPO; DERWENT	2004/08/17 11:38
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-	41	((US-6442950-\$ or US-6408786-\$ or US-6312555-\$ or US-6231732-\$ or US-6229116-\$ or US-6228171-\$ or US-6227140-\$ or US-6202591-\$ or US-6197121-\$ or US-6129808-\$ or US-5994675-\$ or US-5904800-\$ or US-5902404-\$ or US-5097890-\$ or US-5060354-\$ or US-4989543-\$ or US-4561382-\$ or US-3659552-\$ or US-6264812-\$ or US-6221221-\$ or US-6143086-\$ or US-6063199-\$ or US-6051122-\$ or US-5951775-\$ or US-6192827-\$ or US-6347636-\$).did. or (US-6111225-\$ or US-6206975-\$ or US-6340501-\$ or US-6331212-\$ or US-4311427-\$ or US-3656454-\$ or US-6603269-\$ or US-4336329-\$ or US-3909207-\$ or US-6432203-\$ or US-5449444-\$ or US-6310328-\$ or US-5970214-\$ or US-4705700-\$ or US-6547876-\$ or US-6492625-\$ or US-6289842-\$ or US-6001183-\$ or US-5759281-\$ or US-4911638-\$ or US-5044943-\$ or US-6569282-\$ or US-5590445-\$ or US-5246524-\$ or US-6318957-\$ or US-5184723-\$ or US-3918756-\$).did. or (US-4354453-\$ or US-6158951-\$ or US-5911461-\$ or US-5046909-\$ or US-4779877-\$ or US-5788799-\$ or US-5472509-\$ or US-4960488-\$).did. or (US-20030037880-\$ or US-20020185068-\$ or US-20020144786-\$ or US-20020166632-\$ or US-20020144657-\$ or US-20020144655-\$ or US-20020108571-\$ or US-20020076490-\$ or US-20020069970-\$ or US-20010054483-\$ or US-20010029888-\$ or US-20020104751-\$ or US-20030042131-\$ or US-20020104619-\$).did. or (JP-04157162-\$ or JP-11067656-\$ or JP-08031756-\$ or JP-07029912-\$ or JP-03104222-\$ or JP-60231332-\$ or JP-07070730-\$ or JP-10054688-\$ or JP-56099060-\$ or JP-07103658-\$ or JP-58096814-\$).did. or (JP-04157162-\$ or WO-200299861-\$ or JP-2001270798-\$ or JP-07029912-\$ or JP-08139039-\$ or DE-4231921-\$ or JP-05190464-\$).did.) and (cool\$3 with (liner shield shutter annular))	USPAT; US-PGPUB; JPO; DERWENT	2004/08/17 13:23
-	9	("2437414" "4981102" "5482559" "5740845" "5879461" "6000227" "6120660" "6125551" "6331212").PN.	USPAT	2004/08/17 13:15
-	114	(118/715-733.ccls. 156/345.\$ccls. 216/\$.ccls. 427/\$.ccls. 438/\$.ccls.) and (cool\$3 with (liner shield shutter) with (circumfer\$8 annular circle circular surround\$3 encircl\$4 encompass\$4 ring round enclav\$4 enclose\$4 envelop\$4 circumscrib\$4 circumvent\$4))	USPAT; US-PGPUB	2004/08/17 15:55
-	4	(118/715-733.ccls. 156/345.\$ccls. 216/\$.ccls. 427/\$.ccls. 438/\$.ccls.) and (cool\$3 with (liner shield shutter) with (circumfer\$8 annular circle circular surround\$3 encircl\$4 encompass\$4 ring round enclav\$4 enclose\$4 envelop\$4 circumscrib\$4 circumvent\$4))	EPO; JPO; DERWENT	2004/08/17 15:59
-	1126	(cool\$3 with (liner shield shutter) with (circumfer\$8 annular circle circular surround\$3 encircl\$4 encompass\$4 ring round enclav\$4 enclose\$4 envelop\$4 circumscrib\$4 circumvent\$4))	EPO; JPO; DERWENT	2004/08/17 15:59

-	56	(substrate workpiece semiconductor wafer) and (cool\$3 with (liner shield shutter) with (circumfer\$8 annular circle circular surround\$3 encircl\$4 encompass\$4 ring round enclav\$4 enclose\$4 envelop\$4 circumscrib\$4 circumvent\$4))	EPO; JPO; DERWENT	2004/08/17 16:00
-	242	ishioka.in.	USPAT; US-PGPUB	2004/08/17 16:35
-	15	ishioka.in. and (cool\$3 same pipe)	USPAT; US-PGPUB	2004/08/17 17:15
-	0	noorbajhsh.in.	USPAT; US-PGPUB	2004/08/17 17:15
-	24	noorbakhsh.in.	USPAT; US-PGPUB	2004/08/17 17:20
-	9	((("6171438") or ("5565058") or ("5843277") or ("6007673") or ("6176198") or ("5968276") or ("6273022") or ("6143078") or ("5824158")).PN.	USPAT; US-PGPUB	2004/08/17 17:36
-	1	("20020069970").PN.	USPAT; US-PGPUB	2004/08/18 12:44
-	1	("6111225").PN.	USPAT; US-PGPUB	2004/08/18 12:44